

# MONTHLY WEATHER REVIEW.

VOL. XX.

WASHINGTON, D. C., AUGUST, 1892.

No. 8.

BOARD OF EDITORS { Mr. Horace E. Smith, Chief Clerk of Weather Bureau,  
Professors Henry A. Hazen, Thomas Russell, and Charles F. Marvin, and  
Mr. Edward B. Garriott, in charge of Review Room.

## INTRODUCTION.

This REVIEW is based on reports for August, 1892, from 2,834 regular and voluntary observers. These reports are classified as follows: 164 reports from Weather Bureau stations; 47 reports from United States Army post surgeons; 1,889 monthly reports from state weather service and voluntary observers; 221 reports through the Central Pacific Railway Company; 484 marine reports through the co-operation of the Hydrographic Office, Navy Department; 29 reports from Canadian stations; marine reports through the "New York Herald Weather Service;" monthly reports from local weather services established in all states and territories; and international simultaneous observations. Trustworthy newspaper extracts and special reports have also been used.

## CHARACTERISTICS OF THE WEATHER FOR AUGUST, 1892.

The warm wave of the first decade and the cool wave of the latter part of the month were prominent features of August, 1892. From the 3d to the 9th the crest of a warm wave of unusual persistence and intensity traversed the country from the northeast slope of the Rocky Mountains to the middle Atlantic and New England coasts. In central and eastern districts the heat of this period was less intense than that experienced during the third decade of August. Following closely the heated spell of the preceding month it was, however, severely felt in the northern and central states, and in localities where there was a marked deficiency in rainfall vegetation was scorched. The cool wave of the latter part of the month overspread the northern Rocky Mountain and plateau regions on the 27th and 28th, reached the Mississippi and Red River of the North valleys on the 30th, and occupied the Ohio Valley and Lake region at the close of the month. This cool wave was attended by minimum temperatures below 40° in Wyoming, eastern South Dakota, and the Red River of the North Valley, and frost from New Mexico and Colorado over Nebraska, the Dakotas, northern Iowa, Minnesota, and northwestern Wisconsin.

The month was exceptionally dry in the District of Columbia, and generally in Maryland and Virginia. In a number of the Western States drought was broken by general rains on the 9th.

### TEMPERATURE.

The month was warmer than usual save on the northeast slope of the Rocky Mountains, along the middle and south Pacific coasts, in the southwestern states, and along the Saint Lawrence River. The greatest excess in temperature was reported in Virginia and Upper Michigan, where it was 3° to 4°, and the most marked deficiency was noted in northern Louis-

iana and central Texas, where the mean temperature was 2° to 3° lower than the average for August.

### PRECIPITATION.

The monthly precipitation was generally deficient, except from the lower lakes over New York, New England, and the Canadian Maritime Provinces, in northern Georgia, the middle and west Gulf states, and in areas between the Mississippi River and the Rocky Mountains. The greatest excess in precipitation was noted in parts of the Canadian Maritime Provinces, New England, and New York, where it was 2.00 to 4.00 inches, and at points in Maine, northeastern New York, Alabama, Texas, Nebraska, and Idaho the amount was the greatest ever reported for August. The most marked deficiency in precipitation was shown in the Atlantic coast states south of Pennsylvania, where it was 2.00 to 4.00, and in the District of Columbia and at stations in South Carolina, Missouri, New Mexico, Utah, and Oregon the monthly precipitation was the least on record for August.

### STORMS.

The occurrence of local storms was noted most frequently in Kansas, Minnesota, Illinois, New York, Massachusetts, and Florida, where they were reported on five to six days during the month. Local storms were reported over the greatest extent of territory on the 8th, when they occurred in South Dakota, Minnesota, Iowa, Arkansas, Wisconsin, Lower Michigan, Ohio, and West Virginia. On the 7th storms were noted in New York and New England. On the 11th heavy thunder, rain, and hail storms occurred generally throughout New England, and in New Jersey and Tennessee. Heavy rains and high winds prevailed along the New England coast on the 26th and 27th. On the 30th destructive gales caused loss of life and considerable damage to shipping on the upper lakes.

## ATMOSPHERIC PRESSURE (expressed in inches and hundredths).

The distribution of mean atmospheric pressure for August, 1892, as determined from observations taken daily at 8 a. m. and 8 p. m. (75th meridian time), is shown on Chart I by isobars.

The normal pressure for August is highest over districts

lying south of the Lake region and east of the Mississippi River, and along the Pacific coast between the 40th and 50th parallels, where it is above 30.00; it is lowest over the west part of the southern plateau region, where it is below 29.80.

In August there is usually an increase of pressure over the